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ABSTRACT

A study examined the relationship between change in daycare children's classroom behavior and the teacher's socialization behavior. Various behaviors of 69 children in 24 classrooms were observed and coded in the fall and spring of the school year. Observers coded teacher behavior according to the Caregiver Interaction Scale, which assesses detachment, permissiveness, punitiveness, and positive interaction. Results indicated that: (1) high positive interaction for teachers was correlated with children's positive interactions and increased solitary play; (2) children rated high in positive play with peers had teachers who were rated high in punitiveness; and (3) children whose teachers were rated low in positive interaction and high in detachment engaged in more negative interaction with peers than did other children. In a second study, each of 40 caregivers was observed in the classroom, and the caregiver's response to children's misbehaviors was coded for power assertiveness. Later, the caregiver was asked why she thought the child had misbehaved and her response was coded according to the attributional dimensions of internal versus external, controllable versus uncontrollable, and stable versus unstable. Results indicated that caregivers who assigned internal and controllable attributions displayed high power assertiveness. A 14-item reference list is included. (BC)

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Caregiver Cognition and Behavior in Day-Care Classrooms

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Caregiver Cognition and Behavior in Day-Care Classrooms

Introduction

Over the last 15 years, a body of literature has accumulated showing that social competence in the day-care classroom is fostered by caregivers who are warm rather than hostile, and involved and responsive rather than detached (e.g., Holloway & Reichhart-Erickson, 1988; McCartney, 1984). Recently, the interactive effect of the home and day care settings has also been acknowledged (e.g., Holloway & Reichhart-Erickson, 1989; Howes & Olenick, 1986; Kontos & Fiene). Early studies which ignored family background ran the risk of mistakenly attributing differences in developmental outcomes to day care quality, effects which may have actually been caused by home variables or by an interaction of home and day care variables. Recent studies have been more careful to include family measures, but most have used social class background or global indicators of household functioning as indicators of home processes. Because it is difficult to know which aspects of the home environment are the most relevant to study, it is hard to determine whether all the variation due to the influence of the home has been captured.

I would first like to describe a study in which I addressed the relationship of caregiver socialization practices and children's classroom behavior. My primary concern in designing the study was to minimize the confounding of classroom processes and family background. A rigorous test of the effects of caregiver socialization behavior is to examine its relation to change in children's behavior over time. Few day-care studies with the exception of the National Day Care Study have looked at change scores (Ruopp et al, 1979), although this is a fairly common strategy in studies of school effectiveness in later grades (Rutter, 1983; see Willett 1988/89 for a discussion of methodological issues).

My approach was to look at change in children's classroom behavior over the course of a school year. I intended to examine the relationship of the behavioral change to ratings of caregiver socialization behaviors. By examining a child's progress relative to his or her own baseline behavior I hoped to partial out the effects of previous home and day care experiences.

I also included parental social class in the models, paying particular attention to possible interactive effects of social class and caregiver socialization behaviors on children's development. Careful examinations of interactions with social class is another under-utilized strategy in this area of research.

We formed our initial sample by contacting randomly selected day care centers. Up to six children's names were selected from the pool of caucasian four year olds in each classroom. Our initial sample included 83 children in 26 classrooms. The children ranged in age at the time of the first observation from three years ten months to four years seven months.

From mid-September to mid-November, we observed each child twice in the classroom. We also interviewed the children to assess their prosocial reasoning -- however, I will not be reporting on those data today. The behavioral observations were conducted during free play. Each target child was observed for 70 10 second intervals. We coded solitary play, positive play with peers -- which was any sort of direct positive interaction with a peer, either verbal or physical, negative play with peers -- which included any verbal or physical aggression directed at a peer, positive interaction with the teacher, negative interaction with the teacher, observing others without involvement, aimless wandering, and transition between activities.

Inter-observer reliability, as reflected in Cohen's kappa, was good for all variables except negative peer interaction, for which Cohen's kappa was low to moderate.

In the spring, from mid-April to mid-June, we returned to the centers and assessed classroom behavior again. We dropped two classes because the head teacher had changed in the time since the first observation. An additional 8 children had moved to other types of care. So, the sample size had dropped down to 69 children. At that time we also conducted observations of the day care providers.

We observed each head teacher and aide on two separate days during free play for approximately half an hour. Following each observation period, the observer completed a slightly modified version of Arnett's Caregiver Interaction Scale (Arnett, 1987). The scale contained 28 items, including items like :

Behaves warmly to the children
Seems critical of the children
Listens attentively when children speak to her

For each item, the observer indicated on a four point scale how characteristic each statement was of the caregiver.

The Caregiver Interaction Scale contains subscales assessing detachment, permissiveness, punitiveness, and positive interaction (which refers generally to warmth and responsiveness). Alpha coefficients ranged between .75 and .91, indicating high internal consistency for each subscale.

The majority of centers in the sample were private, not-for profit. The average class size was 13 children, with a standard deviation of 4.23. Average child:caregiver ratio was 6.79, with a standard deviation of 2.10. We obtained a global rating of day care quality using portions of the ECERS -- the average total score on the ECERS was 4.59 with a standard deviation of .88. The maximum possible would have been a 7, so these were relatively good centers.

For the data analysis we only used ratings of the head teachers because the aides had such a high turnover rate.

Our first step was to correlate the caregiver socialization behaviors with structural indicators of day care quality. We found strong relationships. Caregivers with more education and more training in early childhood education were more positive, less permissive, less punitive, and less detached. Favorable child:caregiver ratios were associated with high scores on positive interaction and low scores on permissiveness, punitiveness, and detachment. These relationships were almost all significant at the .001 level, with most correlations in the range of .40 to .55.

We then correlated the caregiver socialization scales with the child outcome variables. Separate correlations were obtained for the fall and the spring. As expected, few of the caregiver socialization scales were related to the fall child measures; in fact, out of 20 correlations only three were significant at .05 or better. In the spring, more relationships emerged.

Not surprisingly, children who were observed to have more positive interactions with their caregivers were in classrooms where caregivers were generally rated high on the positive interaction subscale and low on detachment. Children who engaged in more solitary play had teachers who had higher positive interaction subscale scores and were less punitive. Somewhat suprisingly, children who engaged in more intervals of positive play with peers had caregivers who were more punitive, and, marginally, rated lower on positive interaction. However, children whose caregivers were less positive and more detached also engaged in more negative interaction with peers.

The associations that emerged here are pretty much as expected, except for the relation of positive peer interaction with less warm and responsive caregiving and with more punitive caregiving. Interestingly, however, Lamb and his colleagues found -- in Sweden -- that children who were more sociable with peers and unfamiliar adults were in lower quality centers (Lamb et al, 1988). Caregivers who take an active role in the classroom may inadvertently dampen children's peer interaction -- both positive and negative.

In our study, family SES was associated with two sorts of classroom behavior; higher SES children were less likely than lower SES children to be involved in negative peer interactions, and more likely to be involved in positive interactions with caregivers. Higher SES children attended centers where caregivers were more positive in their interactions, less detached, and less punitive (Pearson r's ranged from -.38 to .32). This pattern of association has been found in other studies as well, indicating that -- outside the population of very low-income children -- children from lower social strata often attend centers that fall below standards defined by early childhood professionals.

I then went through a long and painful process of trying to construct multivariate models. While my goal was to use change scores as the outcome -- modeling the difference between fall and spring behavior -- I started with the more modest enterprise of modeling the spring behavior. As predictors, I considered the socialization variables both individually and in interaction with each other -- as well as key aspects of childrens' backgrounds, such as SES, number of hours in care per day, and age of

starting day care. So far I have been unable to fit any multivariate models to the spring data, let alone to the difference scores. The associations reflected in the correlations do not appear to be strong enough to function as significant predictors in combination with other substantive predictors or control variables.

Why were the results too weak to support multivariate models? Ideally, I would have liked a larger sample with more variation on the caregiver behaviors. However, I think the problem goes deeper than design or methodological issues. One thing that struck me in collecting the data was the extent to which the caregivers I observed differed in the type of child behavior they appeared to value and encourage. In a university laboratory school, during what was theoretically free play, children were allowed a choice of activities, but the caregivers spent much of their time demonstrating elaborate art projects and helping children who opted to work on those projects, leaving those who chose fantasy play or other activities to their own devices. In another center the caregiver delegated the art projects to an aide while she -- the head teacher -- roamed the classroom, taking on pretend play roles in the housekeeping corner or helping to build a structure with blocks. In both centers, the caregivers were nurturant, positive and involved -- but the differences in the way they distributed their resources undoubtedly led to different classroom dynamics -- and wreaked havoc with my correlations!

I also think that my caregiver and child outcome measures were too global. A better strategy would have been to develop a richer picture of the behavioral norms and social rules of the classroom in order to capture the meaning of the caregiver behaviors to the children and to the caregivers themselves. This approach would involve looking at clusters or constellations of behaviors, and would focus on immediate contingencies between caregiver and child behavior rather than overall correlations between global categories.

I'll return to these ideas in the discussion section of my talk. But let me first describe a second study which I conducted in collaboration with Catherine Scott-Little. We stepped away from trying to predict global child outcomes and tried instead to understand more about variation in caregiver behavior in the classroom. More

precisely put, our goal was to get a clearer picture of the cognitive processes which lead up to a caregiver's response to a child's misbehavior.

Our theoretical framework drew on attribution theory, which concerns the causal explanations that individual offer to explain the outcomes of events. Evidence on parental attributions suggests that parents who attribute children's misbehavior to internal, dispositional factors are more likely to use stern discipline than when they believe the child was unaware that the behavior was unacceptable (e.g., Dix, Ruble, & Zambarano, 1989). Parents also report being more upset when they believe the child intended the negative behavior, understood the consequences of the behavior, or was able to control the behavior.

We observed and interviewed forty caregivers. They had worked in child care settings for an average of 9 years, with a standard deviation of 7 years. Their educational backgrounds ranged from high school education to completed masters degrees.

During a two-hour observation period, data about the caregiver's response to either aggressive misbehaviors or rebellious/noncompliant misbehaviors were collected. The observer noted details of the misbehavior situation, including which child was involved, how the child behaved and how the caregiver responded to the child. After the observation period, the observer reminded the caregiver about one of the misbehavior situations and asked her why she thought the child had misbehaved.

Her causal attributions were recorded and later coded along the three attributional dimensions of internal to the child vs. external to the child, controllable vs. non-controllable, and stable over time vs. not stable over time. For example, one caregiver gave the following attribution to explain why one child hit another child: "Danny is new to the group and doesn't know how to act yet....He's young and doesn't have as much control over his behaviors as younger children." In other words, she attributed the misbehavior to the child's age and newness to the group -- both internal, uncontrollable, and unstable factors.

The power assertiveness of caregiver responses to the child's misbehavior was coded on a four point scale, from

ignoring the behavior to forcing the child to correct the behavior. Power assertiveness ratings were computed by adding the power assertive ratings for all behavioral responses observed and dividing by the total number of responses exhibited.

We found that caregivers who attributed children's behavior to causes internal to the child were more power assertive in their response to the incident. Caregivers who saw the cause of the misbehavior as something over which the child had control were also more power assertive. Caregivers' behavior was not associated with their assessment of whether the causal factor was likely to change over time. The caregivers' attributions were not related to their amount of experience in day care, their training in early childhood education, their general education, or their general attitudes toward classroom control.

The association of the attributions to the behavior remained intact when we regressed power assertiveness of reponse on each attributional dimension, controlling for each of the caregiver characteristics.

This study illustrates the power of moving to a more micro level to understand the dynamics operating in a given transaction between a child and a caregiver. The study also underlines the importance of considering the caregivers' cognitive processing of events as a key to understanding why they behave in certain ways. Additionally, we benefited from a strong theoretical framework which guided the selection of relevant variables.

We did not assess the child's response to the caregiver's behavior, but such an approach may be more successful than attempting, as we did in the first study, to look at more distal child outcomes collapsed across many different types of situations.

In conclusion, I would like to caution against premature conclusions as to which caregiver behaviors are essential ingredients of high quality day care. After two decades of work, researchers of parental socialization have concluded that it is difficult if not impossible to isolate simple behavioral dimensions that have predictable linear effects on children's development. In their review of parent socialization practices, Grusec and Lytton

(1988) provide the following caveat:

"The enterprise of both socialization research and nutritional science is equally daunting in its complexity, and some similarities can be found also in the history of their findings: Initial claims and warnings, about cholesterol, for instance, have later been found to be premature and had to be qualified and then revised in light of more recent and sophisticated methods of research. A parallel in socialization research would be early findings stressing the deleterious effects of punishment that were modified by later research, suggesting that such effects arise mainly from the extreme use of punishment, especially when it is a manifestation of rejection, but not necessarily from its moderate use." (page 169).

In re-visiting the issue of caregiver behavior, the first task is to re-think the assumption that there is a universally endorsed profile of optimal child development. Parents differ in the balance they seek in their children between assertiveness and docility, cooperation and individualism, independence and attachment. Variation exists on these optimal patterns within and across social class and ethnic groups. Nor is there unanimity in the ranks of social scientists on a definition of optimal child development. In the day care literature, we have seen debates over the implications of the apparently more assertive and noncompliant pattern of behavior evidenced by children attending day care as compared to those reared solely at home. Is this behavior mature and spunky or obnoxious and undesirable? The answer to this question depends on the values of the observer. We need to question whether it is desirable -- or even possible -- to identify and endorse a normative pattern of child outcomes.

Secondly, even if it is possible to articulate a set of developmental goals, it is not easy to isolate the behaviors or conditions that will shape children in the desired direction. The effect of any given behavior depends on its meaning to the parent or caregiver and to the child. The meaning of a behavior hinges on the context in which it occurs. A caregiver who punishes but also provides reasons for the punishment probably has a different effect from one who punishes without also using induction.

A nice illustration of the way in which the same behavior takes on different meaning depending on the caregivers' socialization goals, and depending on the overall repertoire of strategies they use, comes from Baumrind's early work on parents (1973). For the white children in her sample, social competence was associated with firm but democratic parenting, the authoritative pattern. For the small group of black children, social competence was associated with firm and non-democratic parenting -- the authoritarian style. Baumrind argues that the more authoritarian social norms of the black parents may have reflected the actual conditions necessary for optimal development, and hence may have been experienced by the child as supportive and reassuring. For the upper-middle class white families, authoritarian parenting was neither necessary for survival nor normative; Baumrind speculates that authoritarian parenting in these families may be accompanied by anger or emotional coldness, and is experienced much more negatively by the children. Dornbusch and his colleagues (1987) have also tested the validity of Baumrind's constructs in explaining school achievement in minority ethnic groups; they found that these parenting styles do not predict school achievement for Asian families.

In the day care literature, the issues of defining optimal developmental trajectories, and identifying the meaning of various socialization behaviors, come explicitly to the fore in the challenge of modeling the joint effects of home and day care effects. We don't know how parents and caregivers differ in their definitions of optimal child development, nor do we know how what meanings the child attaches to the diverse socialization behaviors that caregivers use across the two settings. The field would benefit from a careful mapping of the variation in social rules and behaviors found in home settings, and how those mesh with the social rules and behaviors of the day care setting.

Comparing classroom processes in the United States with those of Japan underlines the importance of considering the goals of the caregivers in the institution and how different caregiver behaviors contribute to these goals. In Japan, preschool teachers are usually responsible for approximately 30 children -- with no aides. With such a large group, teachers have little time for individual interaction with the caregivers. In the States, of course, this situation is viewed as undesirable because

social competence is thought to develop optimally in the context of a nurturant relationship with an adult. However, large class sizes in Japan are not due to lack of early childhood training or small budgets. In fact, Japanese educators feel the diminished opportunity for caregiver-child interaction is perfect for orienting the child toward the peer group and lessening his or her dependence on the teacher. They reportedly worry that children will feel lonely in smaller groups (Tobin, Wu, and Davidson, 1990).

In one sense, this example takes us far from our own concerns in the States, but I actually think it illustrates nicely the idea that a particular feature of a preschool setting becomes desirable or undesirable only in relation to the goals of the caregivers. I hope we take up the challenge presented in this example to search for more complex and pluralistic models of day care quality in our own country.

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